

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): YAMAMOTO, et al

Serial No.: Not yet assigned

Filed: October 15, 2003

For: APPARATUS AND METHOD FOR REALLOCATING LOGICAL TO  
PHYSICAL DISK DEVICES USING A STORAGE CONTROLLER, WITH  
ACCESS FREQUENCY AND SEQUENTIAL ACCESS RATIO  
CALCULATIONS AND DISPLAY

Group: 2188

Examiner: R. Bragdon

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §1.97 & 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

October 15, 2003

Sir:

In the matter of the above-identified application, this Information Disclosure Statement is being submitted with the following citation as specified in 37 CFR §1.97(d).

"A copy of any patent, publication or other information listed in an Information Disclosure Statement is not required to be provided if it was previously cited by or submitted to the Office in a prior application, provided that the prior application is properly identified in the statement and relied upon for an earlier filing date under 35 U.S.C. §120."

Applicant(s) are submitting herewith a copy of Form PTO-1449 which list documents cited in parent application(s) Serial No. 10/112,865, filed April 2, 2002; which is a continuation of application Serial No. 09/335,175, filed July 17, 1999, now U.S. Patent No. 6,446,161; which is a continuation of application Serial No. 08/833,347, filed April 4,

1997, now U.S. Patent No. 5,956,750.

It is respectfully requested that this information disclosure statement be considered by the Examiner.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus Deposit Account No. 01-2135 (500.35346CX3) please credit any excess fees to such deposit account.

Respectfully submitted,



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ANTONELLI, TERRY, STOUT & KRAUS, LLP

CIB/jdc  
(703) 312-6600

FORM PTO-1449 U.S. Department of Commerce  
(Rev. 4/92) Patent and Trademark Office

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use several sheets if necessary)

ATTY. DOCKET NO.

500.35346CX3

SERIAL NO.

Not assigned

APPLICANT

YAMAMOTO, et al

FILING DATE

October 15, 2003

GROUP

2188

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5 3 9 2 2 4 4	2/95	Jacobson et al	711	114	
	5 3 3 3 3 1 5	7/94	Saether et al			
	5 1 3 1 0 8 7	7/92	Warr			
	5 6 1 9 6 9 0	4/97	Matsumani et al			
	5 5 1 1 1 7 7	4/96	Kagimasa et al	711	114	
	5 5 3 7 5 8 8	7/96	Engelmann et al	707	202	
	5 7 3 7 7 4 3	4/98	Ooe et al	711	112	
	5 7 7 4 6 4 2	6/98	Flon et al	714	13	
	5 5 8 4 0 1 8	12/96	Kamiyama	711	165	
	5 6 0 0 7 8 3	2/97	Kakuta et al	395	182.04	
	5 4 3 7 0 2 2	7/95	Beardsley et al	395	575	

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	ABSTRACT
					YES NO
7 1 4 6 7 5 7	6/95	Japan			XX
3 1 0 2 4 1 8	4/91	Japan			XX
8 6 3 2 9 8	3/96	Japan			XX
6 2 6 7 6 2 9	3/87	Japan			XX
7 1 4 1 1 2 1	6/95	Japan			XX
7 8 4 7 3 2	3/95	Japan			XX

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	D.A. Patterson, et al, A Case for Redundant Arrays of Inexpensive Disks (RAID), ACM SIGMOD Conference, Chicago, IL, (June 1988), pp. 109-116.
	Performance Evaluation of Hot Mirrored Disk Arrays on Disk Failure, Technical Report of IEICE, CPSY95-82, DE95-68 (1995-12), vol. 95-No. 407, by K. Mogi, et al pp. 19-24.
EXAMINER	DATE CONSIDERED

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(Form PTO-1449 [6-4

<b>FORM PTO-1449</b> U.S. Department of Commerce (Rev. 4/92) Patent and Trademark Office  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO.  <b>500.35346CX3</b>	SERIAL NO.  <b>Not assigned</b>
	APPLICANT <b>YAMAMOTO, et al</b>	
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EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5	4	0	4	5	0	0	4/95	Legvold et al	395	575	
		5	6	1	7	4	2	5	4/97	Anderson	371	10.2	
		5	2	5	7	3	5	2	10/93	Yamamoto et al			
		5	5	7	9	4	7	4	11/96	Kakuta et al			
		5	6	1	3	0	8	8	3/97	Achiwa et al			
		5	7	2	9	7	6	1	3/98	Murata et al			
		5	7	3	4	8	1	2	3/98	Yamamoto et al			

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		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	ABSTRACT	
													YES	NO
	0	7	0	7	3	0	9	0	3/95	European				
	0	7	0	8	4	7	3	2	3/95	European				
	3	3	7	7	4	6			9/91	Japan			XX	
	7	2	3	0	3	6	2		8/95	Japan				
	7	3	0	6	8	4	4			Japan				
	5	4	6	3	2	4			2/93	Japan				
	7	4	4	3	2	6			2/95	Japan				

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		5	5	4	6	5	5	7	8/96	Allen et al	711	111	
		5	7	9	0	7	7	3	8/98	DeKoning et al	714	6	
		5	9	0	5	9	9	5	5/99	Tabuchi et al	711	114	

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													YES	NO
		5	1	8	9	3	1	4	7/93	Japan			XX	
	5	5	1	5	7	0	5	3	12/80	Japan			XX	
	5	9	1	3	5	5	6	3	8/84	Japan			XX	
	6	0	1	1	4	9	4	7	6/85	Japan			XX	
	4	3	0	2	0	2	0		10/92	Japan			XX	
	2	3	7	4	1	8			2/90	Japan			XX	

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